Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-14. (Cancelled)

15. (Currently Amended) A method for treating a tumor in ~~a patient~~ patients in need of such treatment, said method comprising injecting an effective amount of a pharmaceutical composition into said tumor, wherein said pharmaceutical composition comprises:

(a) a replication-defective adenoviral vector lacking the E1A, E1B and E3 regions of ~~said~~ an adenovirus; and
~~comprises~~ comprising a nucleic acid sequence coding for a cytokine, under the control of ~~a promoter present in said replication-defective adenoviral vector or an exogenous promoter~~ an adenovirus late promoter, and wherein said cytokine is interleukin-2 or gamma-interferon; and

(b) a pharmaceutically acceptable vehicle, wherein said pharmaceutical composition ~~leads to~~ causes regression of said tumor in at least 40% to 50% of patients.

16. (Currently Amended) The method according to Claim ~~15~~ 27, wherein said adenoviral vector retains the early promoter of the E1A region of the adenovirus, and wherein the nucleic acid sequence coding for the cytokine is under the control of said early E1A promoter.

17. (Cancelled)

18. (Currently Amended) The method according to Claim ~~15~~ 27, wherein said nucleic acid sequence coding for said cytokine is under the control of said ~~exogenous~~ promoter exogenous to said adenovirus.

19-22. (Cancelled)

23. (Currently Amended) The method according to Claim 18, wherein said ~~exogenous~~ promoter exogenous to said adenovirus is the promoter of the IE gene of cytomegalovirus.

24. (Currently Amended) A method for treating a tumor in ~~a patient~~ patients in need of such treatment, said method comprising injecting an effective amount of a pharmaceutical composition into said tumor, wherein said pharmaceutical composition comprises:

(a) a replication-defective adenoviral vector lacking the E1A, E1B and E3 regions of an adenovirus; and
~~comprises~~ comprising a nucleic acid sequence coding for a cytokine, under the control of ~~a promoter present in said replication-defective adenoviral vector or an exogenous promoter~~ an adenovirus late promoter, and wherein said cytokine is GM-CSF, and

(b) a pharmaceutically acceptable vehicle.

25. (Canceled)

26. (Currently Amended) A method for treating a tumor in ~~a patient~~ patients in need of such treatment, said method comprising injecting an effective amount of pharmaceutical composition into said tumor, wherein said pharmaceutical composition comprises:

(a) a replication-defective adenoviral vector lacking the E1A, E1B and E3 regions of an adenovirus; and
~~comprises~~ comprising a nucleic acid sequence coding for a cytokine, under the control of a promoter present in said replication-defective adenoviral vector selected from the group of an adenovirus late promoter and an adenovirus early promoter or ~~an exogenous~~ a promoter exogenous to said adenovirus selected from the group of a promoter contained in the long terminal repeat of a Rous Sarcoma Virus and a promoter of an IE gene of cytomegalovirus; and wherein said cytokine is interleukin-2 or gamma-interferon; and

(b) a pharmaceutically acceptable vehicle, wherein said pharmaceutical composition ~~leads to~~ causes regression and complete disappearance of said tumor in 40% to 50% of patients.

27. (New) The method according to Claim 15 or Claim 24, wherein said adenovirus late promoter used to control expression of said nucleic acid sequence coding for the cytokine is replaced by a promoter exogenous to said adenovirus or an early E1A promoter.

28. (New) A method for treating a tumor in patients in need of such treatment, such method comprising injecting an effective amount of a pharmaceutical composition into said tumor wherein said pharmaceutical composition comprises:

(a) a replication-defective adenoviral vector lacking the E1A, E1B and E3 regions of an adenovirus; and
comprising a nucleic acid sequence coding for a cytokine, under the control of an adenovirus late promoter, and wherein said cytokine is interleukin-2 or gamma-interferon; and

(b) a pharmaceutically acceptable vehicle, wherein said pharmaceutical composition induces stimulation of the immune system in said patients.

29. (New) The method according to Claim 28, wherein said adenovirus late promoter used to control expression of said nucleic acid sequence coding for the cytokine is replaced by a promoter exogenous to said adenovirus or an early E1A promoter.

30. (New) The method according to Claim 29, wherein said nucleic acid sequence coding for said cytokine is under the control of said promoter exogenous to said adenovirus.

31. (New) The method according to Claim 30, wherein said exogenous promoter is the promoter of an IE gene of cytomegalovirus.

32. (New) A method for treating a tumor in patients in need of such treatment, said method comprising injecting an effective amount of a pharmaceutical composition into said tumor wherein said pharmaceutical composition comprises:

(a) a replication-defective adenoviral vector lacking the E1A, E1B and E3 regions of an adenovirus; and
comprising a nucleic acid sequence coding for a cytokine, under the control of an adenovirus late promoter, and wherein said cytokine is interleukin-2; and

(b) a pharmaceutically acceptable vehicle, wherein said pharmaceutical composition causes regression of said tumor in at least 40% to 50% of patients.